

103 FERC ¶ 61,339
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
William L. Massey, and Nora Mead Brownell.

New York Independent System Operator, Inc.

Docket No. ER03-766-000

ORDER CONDITIONALLY ACCEPTING PROPOSED TARIFF REVISIONS

(Issued June 20, 2003)

1. On April 23, 2003, pursuant to Section 205 of the Federal Power Act (FPA),¹ the New York Independent System Operator, Inc. (NYISO), submitted proposed revisions to its Open Access Transmission Tariff (OATT)² and Market Administration and Control Area Services Tariff (Services Tariff). The proposed tariff revisions pertain to the mechanism by which the NYISO's pricing rules will reflect actions taken by the NYISO when it experiences a persistent shortage of 10-minute reserves, and when it calls on Special Case Resources or its Emergency Demand Reduction Program (Scarcity Cost Pricing Proposal).³ As discussed below, we will conditionally accept for filing the NYISO's Scarcity Cost Pricing Proposal, to become effective June 23, 2003. This order benefits customers, because the proposed revisions will send better economic signals during periods of scarcity.

BACKGROUND

¹16 U.S.C. § 864d (2000).

²The NYISO proposes changes to the main body of its OATT, as well as to Attachment J.

³Attached to the filing are the affidavits of the NYISO's Independent Market Advisor (Dr. David Patton of Potomac Economics), and Dr. Scott Harvey and Andrew Hartshorn of LECG, LLC.

PROPOSED REVISIONS

2. The Scarcity Cost Pricing Proposal defines how the NYISO will set locational-based market prices (LBMP) when the NYISO: (1) is short of 10-minute reserves in Real-Time (Reserve Shortage Pricing); or (2) has called for a load reduction from Special Case Resources (SCR) or the Emergency Demand Reduction Program (EDRP) (SCR/EDRP Pricing). The NYISO states that the Scarcity Cost Pricing Proposal represents a temporary measure; the proposal will conform to the changes the NYISO will make in its Real-Time Schedule (RTS) project, once the RTS system is implemented. The NYISO seeks an effective date for the Scarcity Cost Pricing Proposal of June 10, 2003, or as soon thereafter as the Commission issues an order accepting this filing, but no later than June 23, 2003, sixty days after the filing.

3. In support of the Scarcity Cost Pricing Proposal, the NYISO states that when energy is scarce in New York, the current pricing rules do not reflect the costs associated with the actions taken by the NYISO to mitigate these shortage conditions. During shortage conditions, the NYISO's Security Constrained Dispatch (SCD) system may find itself short of the resources it needs in-hour to fulfill its 10-minute reserve requirement. Currently, this shortage is not reflected in Real-Time LBMPs. The NYISO states that if it could commit additional resources in-hour, it would mimic the process used by the NYISO's Real-Time commitment software, the Balancing Market Evaluation (BME), and pay up to the current Bid Cap to solve the shortage. The NYISO also can ask for load reductions from SCR and EDRP resources and pay up to \$500 for these load reductions. The willingness of the NYISO to pay for load reductions is also not reflected in Real-Time prices. As proposed, the Real-Time energy price during scarcity conditions will be the higher of the LBMP set by the SCD, the price set under Reserve Shortage Pricing (if activated), or the price set pursuant to the rules of SCR/EDRP Pricing.

4. The NYISO proposes to implement Reserve Shortage Pricing that sets the LBMP at \$1000/MWh when a 10-minute reserve shortage persists and a short-term response will not immediately remedy the situation, as set out in Section 4.4 of the NYISO's Emergency Operations Manual. The actions to be taken in Real-Time prior to invoking Reserve Shortage Pricing include: (1) conversion of 30-minute reserve to energy or 10-minute synchronized reserve recall of external ICAP energy sales; and (2) activation of SCR and EDRP resources and counting as reserves the load reduction available with a 5 percent voltage reduction. If after these actions the NYISO remains short of 10-minute reserves, then it will invoke Reserve Shortage Pricing and also attempt to purchase emergency energy from neighbors. Reserve shortage pricing will be applied locationally; the specific price adjustments will depend on whether the reserve shortage exists only in the eastern part of the Control Area or state-wide. When the reserve shortage exists only in the eastern part of the Control Area, prices in the East will be adjusted upward but prices in the West

may not be increased if transmission is congested. Specifically, when invoked, the NYISO will adjust shift factors, shadow prices and proxy constraints in the SCD until the LBMP at Load Zone J (New York City) reaches \$1000/MWh. Prices at other locations in the East will vary from the Load Zone J LBMP to reflect the costs of losses. By contrast, when a state-wide reserve shortage exists, prices in all locations throughout the state will be adjusted upward. The LBMP at Load Zone J will be set to \$1000/MWh, and prices at all other locations will vary from the Load Zone J price to reflect only the cost of losses and not the cost of congestion. As a result, the prices in all locations throughout the state will be increased under the proposal during a state-wide reserve shortage.

5. The NYISO proposes to implement SCR/EDRP Pricing during periods when either SCR and EDRP resources are activated, provided that, without the load reduction offered by those resources, the New York Control Area would have experienced a shortage of 30-minute reserves. SCR/EDRP will be applied locationally, and the specific price adjustments will depend on whether a shortage of 30-minute reserves exists only in the eastern part of the Control Area or state-wide. When SCR or EDRP are activated to provide load reduction and the NYISO would have been short of 30-minute reserves in the eastern part of the Control Area, the SCR/EDRP Pricing will modify the LBMP in Load Zone J by adjusting shift factors, shadow prices and proxy constraints until it reaches the marginal price of the SCR or EDRP resource needed to restore the 30-minute reserve requirement. Similar to reserve shortage pricing, LBMPs in other Eastern locations will reflect the costs of losses. If congestion exists, LBMPs in Western New York will not be increased, because of the transmission congestion between Western and Eastern New York. By contrast, if SCR or EDRP are activated and the NYISO would have been short of 30-minute reserves state-wide, the LBMPs in all Load Zones would be adjusted upward. In Load Zone J, the LBMP would rise to the price of the marginal SCR or EDRP resource that would have been needed to restore 30-minute reserves. LBMPs in the other Load Zones would differ from the LBMP in Load Zone J to reflect the cost of losses, but not the cost of congestion. Thus, no transmission congestion charges would apply for transmission between points within the New York Control Area under SCR/EDRP pricing when there would have been a shortage of 30-minute reserves statewide.

6. All dispatchable capacity backed down either because of the 10-minute reserve schedules or to solve for transmission constraints will be paid its lost opportunity cost, to the extent the unit has not already received compensation as a spinning reserve provider or from day-ahead margin protection payments.

NOTICE OF THE FILING AND RESPONSIVE PLEADINGS

7. Notice of the filing was published in the Federal Register,⁴ with comments, protests and interventions due on or before May 14, 2003. Timely motions to intervene were filed by Reliant Resources, Inc.; Strategic Energy, Inc.; and Keyspan-Ravenswood, LLC. Timely motions to intervene and supporting comments were filed by, jointly, Mirant Americas Energy Marketing, LP and Mirant New York, Inc.; AES Eastern Energy, L.P.; PSEG Companies; and, jointly, by Consolidated Energy, Inc., Coral Power, L.L.C., Edison Mission Energy, Inc., Edison Mission Marketing & Trading, Inc., and Aquila Merchant Services, Inc.⁵ Timely motions to intervene and limited protests were filed by Niagara Mohawk Power Corporation (Niagara Mohawk); New York Transmission Owners (NYTO); and, jointly, by Dynegy Power Marketing, Inc. and Dynegy Northeast Generation, Inc. (collectively, Dynegy). NRG Companies (NRG) filed an untimely motion to intervene and limited protest.⁶ On May 23, 2003, the NYISO filed an answer to the protests.

8. The commenters generally support the NYISO's proposed revisions as a means to significantly improve the energy pricing and price signals in New York during periods of shortage. They reiterate the NYISO's position that the proposal is a necessary temporary measure, until the NYISO's new Real-Time Scheduling system⁷ is completed. They state that current NYISO tariffs fail to capture, in Real-Time energy and ancillary services prices, the true cost of meeting demand and reserve requirements.

9. The protestors do not oppose the NYISO's Scarcity Cost Pricing Proposal in general. However, they take issue with the specific details, or lack of details, included in it. They note that, under the proposed revisions, the NYISO will determine the LBMP when the NYISO experiences a "persistent" shortage of reserves. However, the protestors argue, the definition of "persistent" is unclear. For example, NRG argues that, as stated, the proposal allows the NYISO to meet demand through a variety of other actions and avoid scarcity pricing. NRG states that the NYISO should be required to seek Commission

⁴68 Fed. Reg. 23,708 (2003).

⁵All parties that filed supporting comments will be referred to collectively as "commenters."

⁶All parties that filed protests will be referred to collectively as "protestors."

⁷The RTS will allow unit commitment in real-time and will replace the current SCD system. As designed by the NYISO, "the overall objective is to create a real-time dispatch function that integrates the scheduling functions of BME with the actual real-time dispatch in order to eliminate the inherent mismatch between prices created by the dispatch software and schedules produced by a separate process (BME) that is conducted at a different time and assuming different conditions." NYISO, Real-Time Scheduling: Concept of Operation, February 22, 2002.

approval of any irregular or emergency actions it would use to avoid or reduce the need for scarcity pricing associated with a reserve shortage. NRG further suggests that any reserve shortage that persists for two consecutive Security Dispatch Intervals (SDC), or 10 minutes, should trigger reserve shortage pricing.

10. Niagara Mohawk argues that the Scarcity Cost Pricing Proposal should, but fails, to take into account transmission congestion that will occur in conjunction with periods of shortage. Niagara Mohawk contends that, as a result, the proposed revisions impose real-time LBMPs across zones without regard for transmission constraints, and will perpetuate inaccurate price signals. According to Niagara Mohawk, "loads located upstream of the constraints, which would pay less if transmission constraints were recognized, should not be compelled, on even a temporary basis, to bear the burden of the NYISO's incomplete solution to existing pricing distortions."⁸ Niagara Mohawk requests that the Commission direct the NYISO to modify its Scarcity Cost Pricing Proposal to reflect the impact of congestion on prices. Niagara Mohawk further requests that the NYISO be directed to file, by December 31, 2003, a report on the operation of the scarcity pricing provisions during the Summer of 2003, including an analysis of inter-regional cross-subsidies resulting from the stated failure of those provisions to reflect congestion.

11. Indeed, the other protestors state that the Scarcity Cost Pricing Proposal must be evaluated on a regular basis. NRG seeks a Commission directive requiring the NYISO to periodically evaluate and report on the effectiveness of the Scarcity Cost Pricing Proposal in creating scarcity prices capable, in conjunction with capacity revenues, of supporting needed existing and new generation resources in constrained areas.

12. Dynegy states that the Commission should direct the NYISO to make three clarifications. First, Dynegy requests that the NYISO be required to clarify the intent of the "synchronized reserve recall of external ICAP energy sales." Dynegy states that the NYISO should recall only energy from external ICAP that is committed in the NYISO market, not energy sold externally from capacity that is committed to an external market and is not committed in the NYISO market. Second, Dynegy argues that if a generator is scheduled as a physical bilateral, then it should only be curtailed for true export constraints, and not for constraints that may be elsewhere on the system. Third, Dynegy requests clarification that generators backed down, e.g., a less expensive coal unit, to create 10-minute reserve should not be used to set the LBMP.

⁸Niagara Mohawk Protest at p. 4.

13. Dynegy also argues that the Scarcity Cost Pricing Proposal will increase the risk to Unforced Capacity (UCAP) generators⁹ because of the must-offer requirement in the Day-Ahead market. Dynegy therefore contends that, in the event of a forced outage of a unit scheduled in the Day-Ahead market, the reference prices for UCAP generators should be adjusted to reflect the higher scarcity pricing.

14. In its answer to the protests, the NYISO first states that a more precise definition of "persistent" is unnecessary. The NYISO reiterates that a 10-minute reserve shortage will be deemed to exist only if it remains after the prerequisite steps, summarized above, have been taken. The NYISO states that these steps ensure that reserve shortage prices will not be applied to transient reserve shortage situations that may arise from temporary ramp constraints, on the hour import and export schedule changes, or immediately following system shocks such as transmission or generation outages. Moreover, the NYISO argues that NRG's proposed 10-minute limitation is unworkable, since implementing the aforementioned sequence of steps will entail more than 10 minutes. Indeed, the NYISO urges the Commission to permit it flexibility to determine when conditions of scarcity are persistent.

15. Second, the NYISO argues that it need not address transmission congestion at this time. The NYISO reiterates that its proposal is temporary in nature. The NYISO states that the approach Niagara Mohawk advocates could not be developed in time for implementation during the Summer of 2003, nor is it appropriate for the NYISO to devote even more resources to the legacy systems the NYISO will replace when it implements its Real-Time system. The NYISO states that Niagara Mohawk's concept will be included as part of the Real-Time system, although not necessarily from the outset. However, the NYISO avers that it has no objection to submitting a report regarding the performance of scarcity pricing during the Summer of 2003.

16. Third, the NYISO contends that Dynegy's concerns regarding UCAP generators are beyond the scope of this proceeding. The NYISO states that the Scarcity Cost Pricing Proposal would not change the way in which the NYISO operates the New York Control Area and that nothing in the NYISO's filing affects any of its tariff provisions regarding the NYISO's recall or curtailment procedures. The NYISO further states that the backing down of a generating unit to create 10-minute reserves is a prerequisite to the imposition of scarcity pricing, but that the conditions under which such units are backed down are not the subject of this case. Finally, the NYISO states that it need not adjust reference prices to

⁹UCAP generators provide capacity in the NYISO's Installed Capacity (ICAP) markets to meet New York Control Area reserve requirements.

account for higher costs to UCAP generators, since such reference levels are established in accordance with the NYISO's Market Mitigation Measures, which are not at issue here.

DISCUSSION

PROCEDURAL MATTERS

17. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2003), each timely, unopposed motion to intervene serves to make the entity that filed it a party to this proceeding. In addition, given its interest in this proceeding, the early stage of the proceeding and the absence of undue delay or prejudice, we find good cause to grant NRG's untimely, unopposed motion to intervene. While Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2003), prohibits answers to comments unless otherwise ordered by the decisional authority, we will allow the NYISO's response to the intervenors' comments, as it has aided us in understanding the matters at issue in this proceeding.

ANALYSIS

18. The Commission will accept for filing the Scarcity Cost Pricing Proposal, as modified below, to be effective June 23, 2003. The current NYISO tariffs fail to capture, in Real-Time energy and ancillary prices, the true cost of meeting demand and reserve requirements during periods of reserve shortage. Due to limitations of the NYISO's SCD procedures, actions by the NYISO to resolve reserve shortages with out-of-merit actions or demand response are not reflected in prices. Consequently, real-time LBMPs during reserve shortages do not appropriately value capacity during scarcity in the New York Control Area. We believe that the Scarcity Cost Pricing Proposal will provide improved economic signals during periods of scarcity.

19. With regard to Niagara Mohawk's argument that the Scarcity Cost Pricing Proposal must take into account transmission congestion that might occur in conjunction with periods of shortage, the Commission is concerned that the proposal does not reflect congestion costs across affected zones when it is active during state-wide reserve shortages.¹⁰ However, we will not require changes in the current legacy software system at this time. Instead, we will accept the NYISO's Scarcity Cost Pricing Proposal for only a one-year period and require the NYISO to file by December 31, 2003 a report on the operation of the scarcity pricing provisions conditionally accepted in this order for the

¹⁰The proposal does reflect congestion costs when the reserve shortage exists only in the eastern part of the Control Area.

period from June 23, 2003 through November 30, 2003. The report must include an analysis of the impact of the scarcity pricing provisions on: (1) the inter-zonal pattern of congestion payments; and (2) holders of Transmission Congestion Contracts when either the reserve shortage pricing or the SCR/EDRP pricing is active during 2003.

Reserve Shortage Pricing

20. Although the Commission agrees with several commenters and protestors that the Scarcity Cost Pricing Proposal does not precisely define the term “persistent” with respect to when the \$1000/MWh scarcity price would be established, at the same time, we agree with the NYISO that it should have some discretion in determining what is “persistent.” The NYISO notes that, often, when a 10-minute reserve is directed to produce energy, the NYISO area can be short of 10-minute reserves until other generators can be started up as a replacement. The replacement reserve could be a generator on 30-minute reserve, which could take up to 30 minutes to start up. During that process, there would not be a lack of generation to provide 10-minute reserves, but it would take some time for the replacement reserves to become available. On the other end of the spectrum, there could be instances when the NYISO would declare a persistent shortage of 10-minute reserves immediately, such as if a large unit trips off and there are no generators available to replace the reserve. The NYISO states that “it is relatively easy to identify both ends of the spectrum,” but that “it is not possible to define precisely when a shortage has become persistent.” As a result, we reject NRG’s proposed use of two consecutive SDC intervals as too restrictive. Nevertheless, the current tariff language is too broad. The Commission will therefore direct the NYISO to submit a compliance filing, stating and supporting in its tariff the maximum and minimum times that would constitute a persistent shortage, and then allow discretion within those limits. The Commission directs the NYISO to file revised tariff language and a compliance report justifying the maximum and minimum times within 30 days of the date of this order.

21. Dynegy requests clarification on four issues with respect to reserve shortage pricing. First, Dynegy argues that the NYISO should clarify that it will recall energy only from ICAP that is committed in the NYISO market and that it will not recall energy sold externally from capacity that is committed to an external market and is not committed in the NYISO market. Second, Dynegy states that the NYISO should clarify that exports will be curtailed only for true export constraints and not for constraints that may be elsewhere on the system. In its answer, the NYISO responds that its filing does not propose to change its recall or curtailment procedures,¹¹ nor is the filing intended to do so. We believe that the NYISO has addressed Dynegy’s concerns, and will not require further clarification.

¹¹These procedures are set out in the NYISO’s Services Tariff, e.g., Section 4.13.

22. Third, Dynegy states that the NYISO should clarify that generators backed down to create 10-minute reserves should not be used to set the Locational Based Marginal Price. Generators may be backed down to create 10-minute reserves both during periods of persistent shortage of 10-minute reserves as well as during other times that are not periods of reserve shortage. During a period of persistent shortage of 10-minute reserves, the real-time LBMP in the area of the shortage would be set administratively at \$1000/MWh, and not based on a bid below \$1000 of any backed-down generator. However, during other periods, when there is not a persistent shortage of 10-minute reserves, the NYISO does not propose to change the existing method for calculating LBMPs, and we will not require such a change here. Hence, we will deny Dynegy's request for clarification on this point, since granting the request could change the way that LBMPs are established during periods when there is not a shortage of reserves.

23. Finally, Dynegy states that the Scarcity Cost Pricing Proposal will increase the risk to UCAP generators because of their must-offer requirement in the day-ahead market. That is, if a generator is scheduled in the day-ahead market and that generator subsequently experiences a forced outage in real-time, it must buy back its position at the real-time LBMP. The NYISO's Scarcity Cost Pricing Proposal thus may increase the cost to a generator of buying back its day-ahead position in real-time. Dynegy asks the Commission to direct the NYISO to adjust reference prices (used in the NYISO market power mitigation process) to reflect this increased cost. In its answer, the NYISO argues that no changes in its practices and procedures for determining reference levels are required by the Scarcity Cost Pricing Proposal. It maintains that, in most cases, reference prices are determined by a unit's bidding history during competitive conditions, so any legitimate market risks will be reflected in a unit's bids, and thus automatically reflected in its reference price. It adds that if a seller believes it can justify a higher reference price, it can consult with the NYISO as specified in Attachment H of the Services Tariff. We agree with the NYISO, and thus deny Dynegy's request.

SCR/EDRP Pricing

24. With respect to the NYISO's Emergency Demand Response Program Resources and Special Case Resources, the Commission has previously explained that "when these Resources are called, they are the marginal resources required to meet reserve shortages. As the marginal resources, these Resources should set the market-clearing prices."¹² In that same order, the Commission directed the NYISO to file tariff provisions that would

¹²New York Independent System Operator, Inc., 102 FERC ¶ 61,313 at P 25 (2003).

make the SCR and EDRP programs eligible to set prices. The Commission accepts the proposed revisions with respect to the SCR and EDRP programs.

The Commission orders:

(A) The Commission hereby accepts for filing the NYISO's proposed revisions to its OATT and Services Tariff, as modified, to be effective for a one-year period commencing on June 23, 2003, as discussed in the body of this order.

(B) The NYISO is hereby directed to make a compliance filing within 30 days of the date of this order, revising its proposed tariff revisions to reflect minimum and maximum times that would constitute a persistent shortage, with supporting justification, as discussed in the body of this order.

(C) The NYISO is hereby directed to file a detailed analysis by December 31, 2003, of the operation of the scarcity pricing provisions, as discussed in the body of this order.

By the Commission.

(S E A L)

Linda Mitry,
Acting Secretary.